

ART116

leadership series

Instructor Challenges & Opportunities: *low carbohydrate diets, authentic Pilates, older adult fitness, and children's nutrition & fitness*

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This article was written in January, 2005; however, the topics remain relevant for fitness instructors and personal trainers today. Learn more about low carbohydrate diets, authentic Pilates, children's exercise, and fitness for the older adult. Find ways to expand professional development and explore new opportunities.

WHEN LOOKING AT THE YEAR AHEAD, two sets of teaching challenges and two sets of professional opportunities exist for group exercise instructors and personal trainers. First, the challenges--in general, participants in fitness classes are confused or misinformed about the importance of carbohydrates in the diet. The current media frenzy and popular trends, including labeling on packaged foods, have established the idea that "carbs" are bad and cause weight gain. Instructors are challenged this year to share sound nutritional facts with their students and dispel deeply rooted misconceptions about carbohydrates. Alongside misinformation about carbohydrates, "so-called" Pilates programs are rapidly popping up in fitness clubs all over the country. The second task for instructors is to clarify the elements of authentic Pilates. It requires a patient and knowledgeable instructor or personal trainer to replace accepted myth with credible scientific information. Despite the difficulties, opportunities also exist for professional fitness leaders willing to expand their knowledge and earn new certifications this year. Two populations desperately in need of qualified instructors are children and older adults. Fitness leaders can advance their professional growth by learning to work with these groups, as the demands for fitness classes that serve their special needs increases.

THE FIRST APPEAL TO THE PROFESSIONAL FITNESS LEADER IS TO CALM THE LOW CARBOHYDRATE FRENZY. Misinformation about carbohydrates fueled by the current "low carbohydrate" diet fad, sends the message that carbohydrates are responsible for American obesity. The words "watching my carbs" has become the pop-buzz-phrase for much of the health conscious public. "Low Carb" and "No Carb" appear on a multitude of products. Advertising and media hype has the public convinced that a low carbohydrate lifestyle is healthy. This could not be farther from truth.

PARTICIPANTS IN CLASSES NEED TO UNDERSTAND THAT CARBOHYDRATES are one of the six major nutrients whose main function is to produce energy. Fifty to sixty percent of the daily diet must consist of carbohydrates. Without this essential nutrient, a body very quickly runs out of energy. Carbohydrates are abundant in the food supply, in fruits, vegetables, and grains, and divided into two types: simple and complex. The confusion begins with a misunderstanding about these types.

A COMPLEX CARBOHYDRATE is a more complicated sugar molecule than a simple carbohydrate. It breaks down slowly, is less sweet to the taste, provides energy longer, and typically contains more nutrients and fiber when it remains in its whole food unprocessed form. For example, grains (rice, oats, bulgur wheat), vegetables (broccoli, carrots, cauliflower), fruits (apples, peaches, berries), beans (kidney, navy), legumes (peas) are whole food carbohydrates. Examples of processed carbohydrates are flour, bread, dough, cereal (from grains), and modified forms of the other types like dried fruit snacks. Whole food carbohydrates contain a high degree of fiber, which is needed for the absorption of nutrients and the elimination of waste. On the other hand, simple carbohydrates are sweet (like table sugar), usually have minimal fiber and break down quickly providing a surge of insulin with an accompanying rush of energy, followed by a rapid feeling of fatigue.

UNDERSTANDING PROCESSING clarifies some of the confusion about carbohydrates. Processed “carbs” have been handled, manipulated, or modified one or more times. The amount of fiber and other nutrients diminishes with each step of processing. For example, the whole oat has more fiber than the fast cook oatmeal version, and the add water packet has less than the fast cook type. Other examples include shortcut meals in a box and baked goods. In addition, most packaged “carbs” have added sugar and added fiber to make up for the fiber lost during processing. The excess amount of fiber is added as filler and can reduce nutrient absorption. After several steps of processing, a complex “carb” begins to act more like a simple sugar. In addition, “low carb” packaged, processed, alternative foods often contain modified fats and sugars, which can produce digestive distress (diarrhea).

When using the word, “carbs,” most people are thinking processed carbohydrates--bread, pizza, cookies, cakes, muffins--but by using that term, they lump all sugars into one category. Vegetables, fruits, and whole unprocessed grains are also carbohydrates. Reeducate your students by replacing the term “low carb” with “whole food carb” or “complex carbohydrate,” and when a student talks about eliminating “carbs” from their diet, discuss eliminating “**processed**” and “**simple**” carbohydrates not carbohydrates in general. Another factor to consider in selecting a complex carbohydrate is the rate of release of the sugar. The Glycemic Index was developed as a clinical rating system to measure the effects of different foods in elevating insulin levels and blood glucose levels. Although a relatively new idea with some individual variances, certain “complex” carbohydrates release glucose faster than others and faster than some simple sugars.

ADDING TO CONSUMER CONFUSION ABOUT NUTRITION, SOME FAD DIETS SUGGEST REPLACING CARBOHYDRATES WITH PROTEIN. However, protein is not the body’s preferred energy source; its primary function is to build and repair tissue. In the absence of carbohydrates, protein can be converted to glucose. However, the process is taxing to the renal system. High protein diets can cause health problems, and although they may work in the short term to drop pounds (as any weight loss diet that reduces calories would), they risk long term health. Often, high protein dieters, do not learn how to eat a balanced diet. After the weight is lost, they continue eating higher amounts of protein, which may actually cause weight gain and other health problems.

THE FDA RECOMMENDATIONS remain the standard for sound nutrition. Simple visual models help the consumer to select foods that assure the consumption of all essential nutrients. According to their guidelines, over fifty percent of the diet should consist of grains, fruits and vegetables (primarily complex carbohydrates), with much smaller amounts recommended for dairy and meat (protein). The ideal grain would be in its whole form (whole grain rice or whole grain bread) and not white rice or white bread.

CARBOHYDRATE GUIDELINES

- ♣ Learn more about proper nutrition from reliable sources such as professional fitness associations or nutrition groups like the American Dietetic Association and not from popular diet books, fad diet doctors, and advertising hype.
- ♣ Follow the guidelines of the FDA. Eat a balanced diet with at least fifty percent complex carbohydrates.
- ♣ Eat complex, whole food, unprocessed carbohydrates (an apple vs. a fruit roll up).
- ♣ Avoid foods with added simple sugars (natural chunky applesauce and not applesauce with added sugar).
- ♣ Avoid foods containing high fructose corn syrup.
- ♣ Eat simply (raw or lightly steamed vegetables/fruits - no sauces containing added sugars or animal fats). Use herbs and olive oil for flavor if needed.
- ♣ Avoid carbohydrates that have more than one step of processing. For example, choose whole grain long cook rice as opposed to thirty-second boil in a bag white rice. Remember that most boxed and packaged foods are highly processed.
- ♣ Read the label for ingredients. Some packaged meats (whole turkeys, pork etc) contain added sugar.
- ♣ Avoid foods that contain modified carbohydrates and fiber fillers.
- ♣ Eat low on the Glycemic Index.
- ♣ Spread the word that excess calories cause weight gain. Carbs are good when you eat the right kind--complex, whole food, unprocessed carbs!"

MOVING FROM FOOD TO EXERCISE TECHNIQUES, PILATES HAS BECOME VERY POPULAR, BUT ALL PILATES CLASSES ARE NOT CREATED EQUAL.

Pilates, an exercise technique developed by Joseph Pilates in the 1920's, has become noticed and a popular recent exercise trend. After his death, the trademark to the name Pilates was released by U.S. District Court Judge, Miriam Cedabaum. The name, Pilates, is now generic, in public domain, and open for anyone to use. Any exercise program can be called Pilates. However, the original Pilates exercises are specialized and challenging. Only a trained, experienced instructor, who knows how to use the training principle of progression, can teach the original technique safely. Its methodology effectively incorporates the six principles (concentration, control, center, fluidity, precision, breath) and engages the Powerhouse muscles (gluteals, abdominals, and back), which are fundamental to the safety of the exercises. The technique is not meant to be competitive or a gymnastic event. An authentic Pilates instructor is patient, attentive to detail, and works carefully with each individual. Exercises borrowed from Pilates without the use of the technique can be risky.

**ANSWER YES, TO THE FOLLOWING QUESTIONS
THE INSTRUCTOR IS TEACHING IN THE SPIRIT OF JOSEPH PILATES**

- 👍 Does the instructor discuss or refer to the originator of the technique, Joseph Pilates?
- 👍 Does the instructor use ALL of the 6 principles during each exercise—concentration, control, center, fluidity, precision, and breath?
- 👍 Is the Powerhouse the main set of muscles used when performing EVERY exercise?
- 👍 Is the class balanced? Does it focus on other muscles in addition to the hip flexors?
 - 👍 Do students seem free from complaints about pain, especially back pain?
- 👍 Are the exercises progressive? Does the instructor set a foundation of individual strength before teaching challenging exercises?
- 👍 Are the students being individually monitored and performing the exercises correctly?
 - 👍 Does the instructor incorporate ideas for healthy living into the class?
 - 👍 Is the size of the class small enough for the instructor to monitor everyone?
 - 👍 Does the instructor encourage self-awareness?

CHILDREN AND OLDER ADULTS, the fastest growing groups of individuals interested in fitness, create opportunities for fitness leader. Each group has unique needs. You can expand your professional career by learning to work with these special populations.

CHILDREN'S CLASSES provide outlets for them to stay active. They need a high energy, enthusiastic approach with plenty of imaginative touches. The activities, games, and music must be age and developmentally appropriate. All equipment and props must be tested, safe, and designed for activity. It helps to include parents for support and involvement. Fitness birthday parties and fitness summer camps are two great ways to advertise and jump-start a children's class. Children have a short attention span so variety is the key to success. In addition, a child's physiology differs from an adult's so repetitive impact, which can harm epiphyseal (growth) plates should be avoided. Replace disciplined bouts of aerobics with playful bouts of activity. Fill classes with movement, fun, and laughter. If you're young at heart, you'll love teaching children.

OLDER ADULTS are becoming the fastest growing population, as the baby boomers continue to retire. In the next decade, the older adult population will be the largest group of exercising adults. Retired individuals usually have the time and expendable money to enroll in fitness classes and are seeking activities to keep busy. However, working with older adults requires special skills. A wide diversity exists in both the fitness levels and quality of health of the over fifty population. Many older adults have kept active throughout life while other sedentary older adults seek exercise as an alternative to medication in reviving lost health. Other older adults may be taking various medications some of which can alter or interfere with heart rates or effect balance and stamina. Social interaction with other adults becomes a major motivator to continue the activity. Depression due to poor health, loss of youthful vitality, and the death or loss of a spouse and friends is common. The fit older adult may have difficulty accepting the natural process of diminishing physiology. Seniors need the best environment, lighting, and equipment. The exercises chosen must be appropriate for the group avoiding exercise positions that may be difficult to accomplish or perform. An older adult exercise leader must be patient, sensitive, attentive to individual needs, willing to adapt, and a good listener. Working with older adults can be very heartwarming and enlightening because older adults have a lifetime of wisdom to share. Any of the four challenges and opportunities discussed in this article that you tackle this year will undoubtedly advance your career and professional development.

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ART116 QUIZ

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- 1 - Protein's main function is to produce energy.
- 2 - Without carbohydrates, a body very quickly runs out of energy.
- 3 - A complex carbohydrate breaks down quickly.
- 4 - A simple carbohydrate is less sweet to the taste and provides sustained energy.
- 5 - Processed "carbs" have been handled, manipulated, or modified one or more times.
- 6 - The amount of fiber and other nutrients increases with each step of processing.
- 7 - The whole oat has more fiber than the add water packet.
- 8 - The name, Pilates, is now generic, in public domain, and open for anyone to use.
- 9 - Children have a short attention span so variety is the key to success.
- 10 - An older adult exercise leader must be patient, sensitive, and a good listener.